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GENERAL STUDIES (TEST CODE : 2211)

Name of Candidate	H. S. BHAVANA		
Medium Eng./Hindi	ENGLISH	Registration Number	13508
Center	ONLINE	Date	27/2022

INDEX TABLE			INSTRUCTIONS
Q. No.	Maximum Marks	Marks Obtained	
1	10		1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code). उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
2	10		2. There are TWENTY questions printed in ENGLISH & HINDI इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3	10		3. All questions are compulsory. सभी प्रश्न अनिवार्य हैं।
4	10		4. The number of marks carried by a question/part is indicated against it. प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5	10		5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other than the authorized one. प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
6	15		6. Word limit in questions, if specified, should be adhered to. प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7	15		7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off. उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।
Total Marks Obtained:			
Remarks:			

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EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

1. The Cholas are inextricably linked with the zenith of Dravidian art and architecture. Comment. (150 words) 10

चोल द्रविड़ कला और स्थापत्य की पराकाष्ठा से अनन्य रूप से संबद्ध हैं। टिप्पणी कीजिए।

Q1

With the rise of Imperial Cholas the south Indian art and architecture saw a new breath of life.

Chola architecture :-

1] Construction of Dravidian style of temples at Tanjavur-

Brihadeswaran Koil by Raja Raja Chola.

2) Gangikondacholapuram Temple by Rajendra Chola.

3) Airavateswaran temple at Dwarasamudram

→ These temples were touchstone of architecture - with massive vimanas, - (single 80 tonne of stone kalash at Brihadishwaran temple), separate Amman Shrines and Nandi.

→ Dravidian style temples with Pushkarani, large boundary walls, Kalyan mantap, with pillared halls, Gopurams on four sides were the characteristics.

Metallurgy and sculptures -

Cholas were known for Bronze images of Nataraja and other deities. Tin was imported from South East Asia.

Chidambaram temple - houses the famous bronze Nataraja.

Stone sculptures were found all along the walls of temples.

Paintings:- Murals and frescos have been painted on the walls and roof of Brihadeshwara temple. Eg> Ravana

lifting Mount Kailash, Dakshinamurthy Kalbhairav are prominent. Also famous Tanjore art - painting with semi precious stones was patronised.

Music and Dance :- The famous Carnatic Musicians like Muttuswamy Dikshitar, Tyagaraja were patronised. Tanjavoor Veenda and Nadaswaram are famous even now. Bharatnatyam and temple dances were also prominent during Chola period.

Cholas revived and infused South Indian art and architecture leaving behind a legacy which was followed by later Vijayanagara and Madurai Nayakas.

- 2 Among the major legacies of the Indian freedom movement, civil liberties formed an important one. Analyse. (150 words) 10

Q2.

The Indian freedom movement was a composite movement which fought for independence from the colonial British Rule along with which Social - Economic - Political changes occurred simultaneously.

Civil liberties - and its evolution.

1) Early Socio-Economic Reformers and freedom fighters fought for:-

* Economic liberty - Drain of Wealth - Theory by Dada bhai Naoroji, Gopal Krishna Gokhale, Romesh Chandra Mukherjee.

* Civil liberties and basic human rights came into fore front when:-

→ Abolition of Sati - Raja Ram Mohan Roy

→ Widow remarriage - Ishwar Chandra Vidyasagar.

→ Education - By Jotiba Phule, Savitri Phule

→ Against child Marriage - Sarada Act.

These reforms were made on constant pressure by Indian intellectuals

2) Freedom of Press - The various Press Acts passed by British was

impinging on the freedom of Indian press.

↳ Surendranath Bannerjee, Anand Mohan Bose, Shishir Kumar Ghose fought for press freedom.

3) Sedition Act - which crippled free speech was widely used to curb Indian Nationalism. Bal Gangadar Tilak, Gandhiji were imprisoned for Sedition and they fought against it.

4) Nehru Report:- Had provisions for linguistic reorganisation of states, Universal adult franchise, joint electorates.

5) Karachi Session of Indian National Congress - Presided by Sardar Patel gave outlines of fundamental rights and economic rights.

Freedom movement stressed on the basic civil liberties which was later enshrined in the constitution in various chapters - Preamble, fundamental rights, Directive Principles etc.

3. The Berlin Conference of 1884-85 in many ways set the ground for the scramble in Africa. Elucidate. (150 words) 10

Q3.

The Berlin Conference

held in Germany, presided by King Leopold II of Belgium was called upon to divide the African territories between the European Colonial powers.

1. The division of territories in entire Africa except Ethiopia and Liberia.
2. France was given colonies near the Mediterranean Sea - Algiers and Tunisia.
3. Spain - was given rights over west coast of Africa - bordering the Saharan desert.
4. Vast territory of Congo was held by King Leopold of Belgium.
5. Passage was free for the river and valleys of Niger and Congo.

6. Britain held the territories of Egypt, Zambia, Tanzania, South Africa.
7. Germany and Portugal got major share in Africa.
8. The division of Africa among the major powers was complete at the Berlin Conference. This was done without knowing the ground realities or visiting the areas.
9. This left an everlasting mark on Africa.
 - Division of Tribes into different countries.
 - Perpetual civil wars.
 - Exploitation and economic loss
 - Continuing poverty.

"Scramble for Africa" began in the Berlin Conference, the after effects of which are witnessed even now.

4. What is a cloudburst and what are its effects? Why are they more frequent in the Himalayan region? (150 words) 10

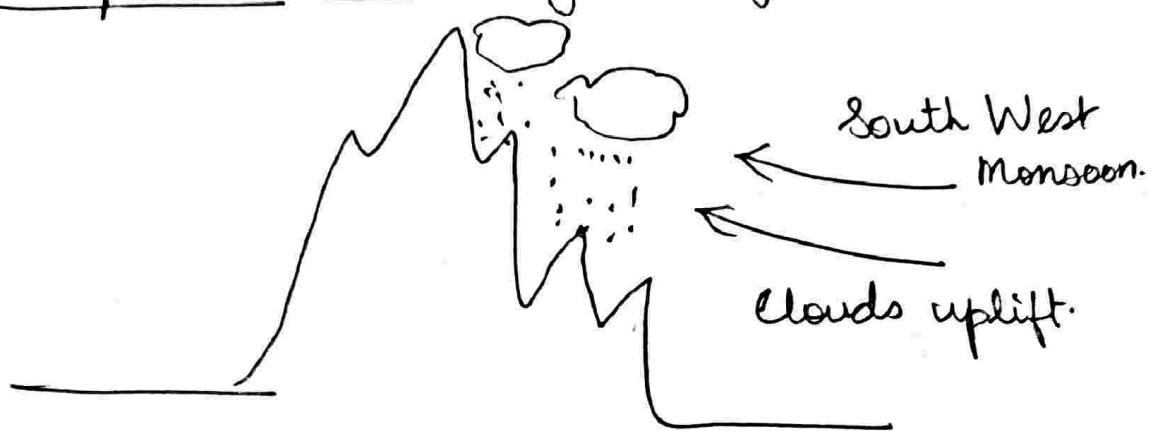
Q4.

A cloudburst is a sudden, rapid heavy downpour of rain in a small area and a short duration. It can have devastating consequences.

Effects of cloud burst.

1. Sudden flooding of the area in a short span of time.
e.g Kedarnath floods in Uttarakhand. 2013.
2. GLOF - Glacial lake Outbursts can also occur leading to more heavy flooding.
3. Land slides, Mud slides are common due to washing away / erosion of mountain slopes.
4. Loss of forests - due to flooding, landslide and erosion. - It can also lead to rolling stones phenomenon.
5. Impact on life of people and economy of the region.

Frequent in Himalayan Region :-



- 1) Topography of Himalayas: high rise mountains - when they encounter moisture laden clouds of South West Monsoon.
- 2) Orographic Rainfall - Due to barrier created by mountains leads to heavy rainfall.
e.g. Srinagar floods.
- 3) It is common in South West Monsoon season due to the incoming wind from Bay of Bengal region

Cloud bursts are increasing due to climate change, variations in rainfall cycle and sudden wind reversals. It can happen in other regions but is common in Himalayas due to its topography.

5. Despite its potential, there are several challenges in the implementation of the Ken-Betwa Link Project. Discuss. (150 words) 10

Q5.

Ken-Betwa River interlinking project is a much needed measure to solve the issues of drought prone Bundelkhand region.

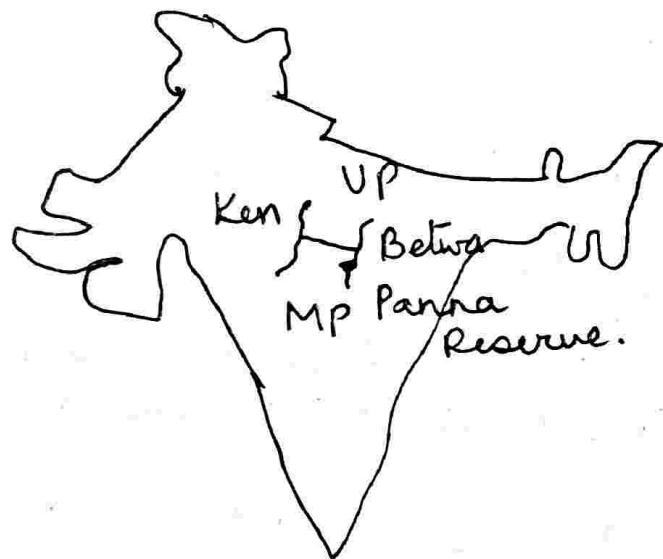


Fig: location of Ken Betwa Project.

Potential of Ken Betwa Project:-

1. Provision of irrigation facility to the nearby villages of UP and MP. Thereby increasing the agricultural production.

2. Generation of Hydro electric power from the Dudhan Dam.
3. Drinking water Supply to the villages.
4. Acts as a flood balancing reservoir to avoid flooding of the region during monsoon.
5. Generation of livelihood and employment in fisheries sector, power generation and agro based industries.

Challenges :-

1. Cost of the project - being a lift irrigation project it would be expensive
2. Submergence of nearby areas and rehabilitation of poor tribals affected
↳ huge socio economic cost.
3. Panna tiger reserve will loose more than 500 hectares of land - environmental damage.
4. It may lead to tectonic imbalances due to impounding of water.

Alternatives like small hydro, water conservation methods can be explored. Also the learnings from Pollavaram Project can be utilised.

6. Identify the issues related to production and supply of coal in India. How can these issues be addressed? (150 words) 10

India has the third largest coal reserves in the world. Yet it imports coal to fulfill the needs of its energy.

Issues related to Production of Coal:

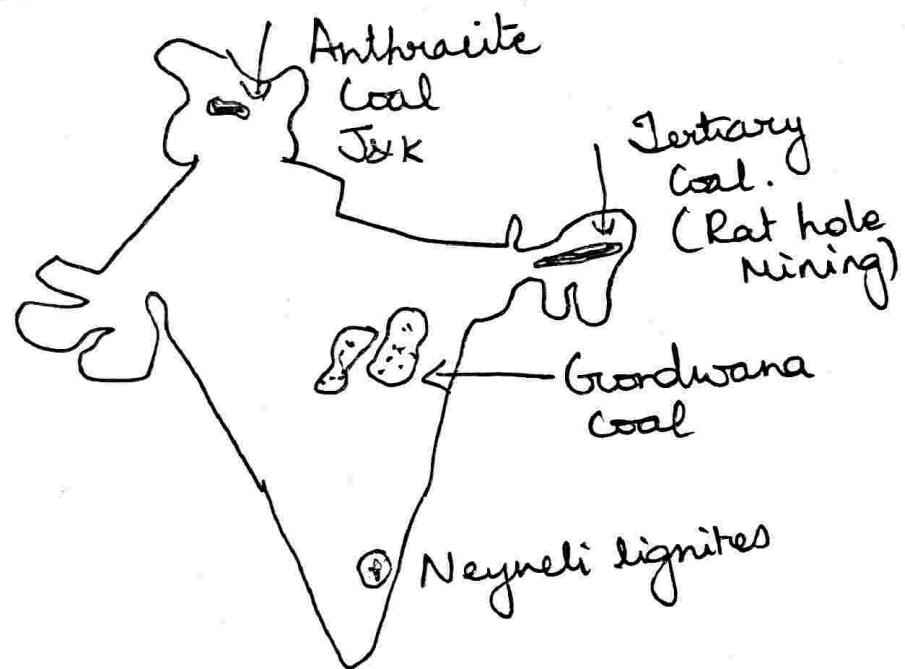


Fig: Geographical distribution of coal.

1. Skewed geographical distribution of coal in few states - Jharkhand, Odisha, West Bengal have 70% of reserves.
2. Poor quality of coal - Bituminous and Lignite - high in ash content are found. Coking grade coal is unavailable.

3. Obsolete methods of mining - open cast mining, Rat hole mining → which lowers production efficiency.
4. Washing of coal → requires labour and large quantity of water leads to environmental pollution.

Supply related Issues.

1. 90% of coal is transported by Rail which is slow and suffers from various problems of loading, unloading, theft, pilferage, delay etc.
2. Administrative reasons: related to auctions, Captive mining and profit sharing.
3. Mismatch between demand and supply
→ A recent shortage of coal was observed during April-May when demand was at peak due to summer.

Solutions

- ↳ Many reforms have been brought in through HELP, and monitoring apps like KOYALA, SHAKTI etc.
- ↳ Bringing in private players and technology enhancement to get competitive spirit, rather than focusing on CIL-PSU.

7. Present the geographical distribution of agro-based industries in India and discuss the challenges faced by them. (150 words) 10

Q7.

India is Primarily an agro based economy with agriculture contributing upto 18% of total GDP.

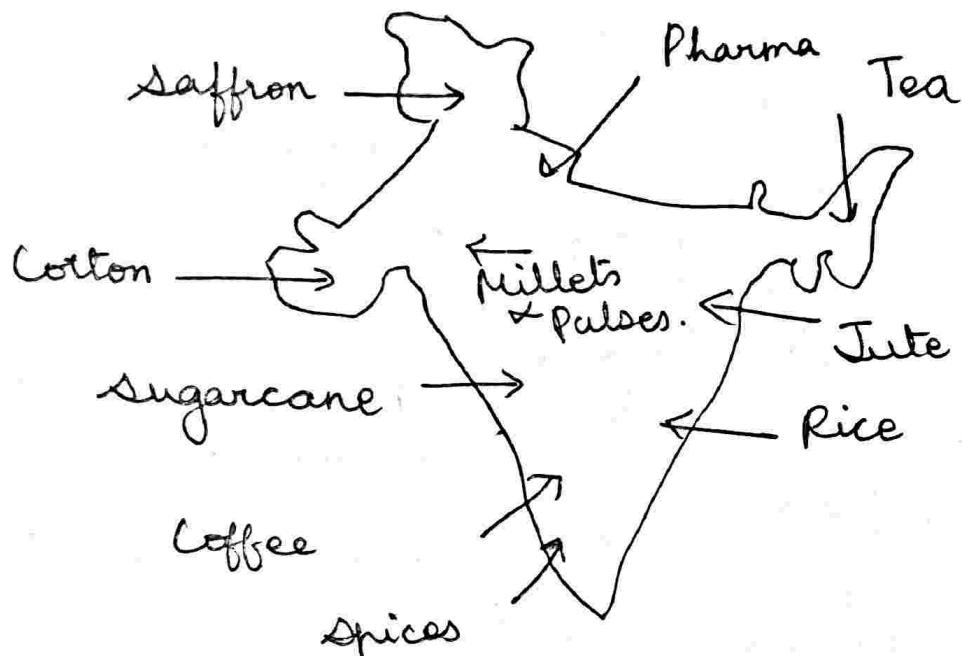


Fig: Distribution of Major Agro production.

Distribution:- India being a vast country, it has various agro climatic zones - suitable for a particular crop.

- 1) Staples:- Wheat, Rice, Pulses and Millets are distributed across the country.
→ Rice and Wheat ← Punjab, Haryana and Western UP
↳ Exported to Western Countries.

2. Commercial crops:-

- a) Sugar Cane - In regions of Maharashtra, UP
North Karnataka - Cane crushing Industries
are present here.
- b) Cotton :- Gujarat, Maharashtra. - Cotton
spinning, weaving, textile mills are
present in Mumbai and Ahmedabad.
- c) Tea - In North East - Assam, Darjeeling
and few parts of Kerala - India is the
largest exporter of tea - flu cured variety.
- d) Coffee - State of Karnataka - Which has
majority share in export of coffee.
- e) Spices - Kerala, Karnataka and Tamil
Nadu - maximum producer of
variety of Spices.

Numerous other Industries
are also based close to the areas
of production. As agro based
industries are perishable - and weight
losing. According to Webers theory they
are located close to source.

Challenges faced by Agro based Industries :-

1. Seasonal employment.
2. Fluctuations in prices - due to production - supply - demand variations.
3. Impact of Administrative decisions -
e.g. recently wheat exports were banned - hurt the farmers
4. Lack of proper processing, warehousing, distribution, branding and marketing.
5. Lack of expertise and use of technology in agro processing.
Most are small cottage industries or family enterprises.

The schemes like SAMPADA, RODTEP, Mega food parks, Credit facilities, have given a huge boost to this sector.

8. The caste system continues to be one of the key drivers of poverty and inequality in India. Discuss. (150 words) 10

Q8.

Caste is a hierarchical endogamous structure, with notions of purity and pollution often linked with a heredity occupation. It is a medieval notion which continues to perpetrate the various stages of Indian social life.

Caste as Key driver of Poverty and Inequality

1. Studies by Amartya Sen - show that though Caste - Occupation link has reduced, it continues to be prominent in villages.
↳ Most poor are from SCs and lower castes.
2. Upward mobility is a gradual and intergenerational process - due to which many poor castes continue with menial jobs even in Urban areas.
3. Stigmatization of few occupations like Sanitation workers, funeral workers has hampered several rehabilitation projects. eg: Mahars, doms, Madigas etc.

4. Issues of child labour - are more prevalent in lower castes due to poverty. This hampers the education and overall potential of the children leading to a vicious cycle of poverty.
5. Class inequalities as a consequence of caste. → Most SCs are employed in low paying jobs.

Solutions :- In form of reservations, ear marked schemes - MUDRA Yojana, Nai Udaan, Dalit Bandhu of Telangana have provided a ladder to the lower castes.

↳ Dalit Capitalism and entrepreneurship
eg: Shiv Nadar of HCL Tech + has led to formation of strong pressure groups to fight for rights - eg DICCI.

However despite numerous efforts the poverty and caste equations continue to exist although to a much lesser extent. Urbanisation, Westernization can aid to give a thrust and delink the ill effects of Caste system.

9. Discuss the issues faced by domestic workers in India. Also suggest measures that can be taken to empower them. (150 words) 10

Q9. Domestic Workers can be called as the Missing labourers as most of the labour provisions, social security doesn't cover the domestic workers.

Issues faced by Domestic Workers

1. Pink collared jobs - where most of the house hold domestic workers are women.
 - ↳ Illiterate - to be aware about right.
 - ↳ Gender - pay wage gap - as women are paid less.
 - ↳ Prone to exploitation and over work - under the garb of paternalistic care.
 - ↳ Even Sexual Harassment occurs
2. child labour - is also rampant among domestic workers.

- ↳ young girls are hired as stay at home maid.
- 3. Devoid of regular wages, social security, or job security → can be retrenched without any notice period.

Measures taken for empowerment

- Certain Acts like Sexual Harassment at Work place, Labour Codes mention Domestic Workers explicitly.
- During COVID the PM also expressed concern about Domestic workers.

further suggestions:

- ↳ To form Domestic Workers associations or cooperatives.
- ↳ formulate a minimum wage for domestic workers - and regulate work timings
- ↳ Create awareness among workers for their rights.

10. Given the deeply gendered impact of population control measures, examine the need to rethink the current approach of population control measures in India. (150 words) 10

(Q10.

India has 17% of world population on 4% of its geographical area with 2% of water resources. It is projected to overtake China as the most populous country by 2030.

Gendered impact of population control

- ↳ Major / unfair share of burden falls on women - More than 75% undergo sterilization - Tubectomy which is a complex procedure compared to Vasectomy.
- ↳ Social Conditions of Women - who lack reproductive education are internalized to take the burden of child birth, rearing, etc - with little help or sensitivity from men.
- ↳ lack of alternatives in Contraception, lack of knowhow and stigma associated with purchase of contraceptives.

Current Approach

- ↳ focus of family planning schemes also are disproportionately targetting women.
- ↳ Two child norm - has enforced strict reproductive decision making on families.
- ↳ population control law of UP may also infringe on basic rights

Needed reforms:-

- ↳ "Education is the best contraceptive" Increase awareness among women through sex education in Schools.
- ↳ Alternatives to sterilization - Reversible methods of contraception - Hormonal Pills, Condoms, Injectables "Chaya" *
- ↳ Discussion about Reproductive health in Saas Bahu Samelan, family counselling etc.
- ↳ Sensitization of Indian men to opt for Vasectomy.

Population control is a much needed measure to ensure a good standard of living, but the burden should be shared by both the sexes.

11. Examine the impact of the Sramana tradition on the Vedic religion and its relation with the emergence of Jainism, Buddhism and Ajivika sects.

(250 words) 15

Q11.

Sramana refers to "work out one's own salvation by one self". It relates to the life styles of ascetics and monks who have renounced the worldly pleasures.

Impact of Sramana tradition on Vedic religion:-

- During the early Vedic period emphasis was on materialistic pleasures.
 - ↳ This focused more on soul and inner self = concept of "Sanyasa".
- Reform in sacrifices and more tilt towards Bakti
 - ↳ Can be seen in Bhakti movement in 10-12 Cen AD.
- Rise of monks and ascetics even in Hindu religion.— who renounced their families and lived a nomadic life. eg: Naga babas.

Relation to emergence of Jainism Buddhism and Ajivika.

- These heterodox sects arose as a reaction in response to the evils that had crept into Vedic religion.
- These sects were based on Sramana tradition:
- ↳ Jainism - Tirthankaras were digambaras and practiced begging, did not have any assets at all
 - followed a strict life with penance and rituals
 - Even now Jain monks continue to lead a severe sramana life.
- ↳ Buddhism - Buddha himself renounced the luxuries of palace and led a simple life.
 - focused on soul and inner self with less importance to materials.
 - One has to work out one's salvation by one's deeds - Observed in

Bodhisattvas and Jataka Tales.

Ajivikas

- Were contemporaries of Buddhism and Jainism
- Believed completely in destiny were ultimate fatalists
- followed a strict code - were nude monks similar to Digambar Jains.
- Makalaputta Grosala was one of the prominent Ajivika saint.

Sramana tradition can be observed in - ~~siddhas~~ Siddhas, Saints of specific Mutts, Lingayat community, Buddhist monks.

Sramana thus aided to reform the expensive sacrifices, rituals, complex traditions of Vedic religion and laid a simple, austere path for salvation.

12. Shed light on the use of symbols and symbolic language by Mahatma Gandhi for both, integrating masses into the National Movement and against social evils. (250 words) 15

(Q12.

The Gandhian Phase of Indian National movement was composite in nature and dealt with → driving the colonial British away along with socio-economic-political reforms in India.

* Gandhiji adopted a powerful symbolic language to achieve his goal.

1) use of dhoti → To identify with the common man, a symbol of "atmanirbhartha" - self reliance.

→ sending out a powerful signal of boycotting foreign cloths. to British

2) Simple dressing → To sympathise with the poor and downtrodden, an Indic dress opposed to the suit and coat of British.

3) Use of Salt - for satyagraha -
Indispensable part of every household
→ had mass effect - could relate to everyone.

4) Message through Satyagraha - A simple and easy to follow method, even by common men as opposed to armed struggle. It was inclusive and integrated the people.

5) Fasting - To relate to famine conditions
→ used it as a tool to challenge British
→ hunger strikes were followed by common men also.

6) Picketing and boycott - By bonfires of British made goods → stood to vent the anger the Indians had against exploitative rule of British.

7) Calling off Non Cooperation Movement - To lay emphasis on Non violent method of struggle.

8). By talking with British - when needed so as to maintain a cordial relationship of "hate the sin" not the sinner.

9). To the ground, overcame intercaste hierarchies - participated even in temple entry movements - To eradicate the suppression of lower castes.

10) forged Hindu Muslim Unity: - By Khilafat movement leadership, even sympathising with everyone during riots.

By living a saintly life and 'my life is my message' was what Gandhiji stood for and practised.

13. Giving a brief overview of the three Carnatic Wars, discuss the factors that led to the success of the British against the French in the struggle for control over India. (250 words) 15

Q.13.

The Carnatic Wars or the three Anglo-French wars occurred in India in the Carnatic region during 1760 n 1810 AD.

First Carnatic war - was a result of war in Europe which was reflected in India - It ended with Treaty of Ax la Chapple

Second Carnatic War was due to the succession war among the Carnatic Nawabs - After this the French General Duplex was recalled.

Third Carnatic war - gave a decisive victory to the British and it ended with Treaty of Paris. The French were restricted to few regions in India.

Factors for success of British

1. Governing structure of French East India Company - was under the French Government - It had rigid bureaucratic hurdles, and hierarchical decision making leading to delays.
2. Superior navy of British compared to French.
3. British control of Bengal - which gave them capital to finance wars.
4. France was fighting wars on two places - Back in Europe and in India.
5. Lack of able leadership to the French army - General Duplex was recalled at the right moment.

6. Support of regional princes to the British - who were able to play with the draw backs of rulers.
7. Well trained British army and navy compared to French.

While these factors favoured British, the French retreated and focused on its other colonies which were in South America and South East Asia.

14. Provide an account of the issues that led to a crisis in Punjab in the 1980s. Also, discuss the roadmap to peace that was eventually adopted.

(250 words) 15

Q14.

The Crisis in Punjab was the result of culmination of numerous factors starting from Independence of India.

Evolution of Punjab Crisis

- ↳ Messy Partition of India - Pakistan divided the Sikhs and Punjab between the two countries.
- ↳ Punjabi along with Hindi speaking states of Haryana and Himachal Pradesh faced linguistic issues - became a suppressed minority.
- ↳ Division of Punjab into 3 states gave the much needed Sikh identity and impetus to Punjabi language and culture, however the problems continued.

- ↳ Rise of Militant nationalism - Khalistan demand from religious fundamentalists in Punjab.
- ↳ Binaanwale who was the face of sikh extremism - was killed in operation Blue Star at Golden Temple Amritsar.
 - which deeply hurt the religious sentiments of sikhs - led to assassination of then PM Indira Gandhi
- ↳ The sikh riots after the death of Indira Gandhi was a black chapter in democracy of India. - it led to division and rise of communal tensions between Sikhs and Hindus.

Road map to Peace.

- The statehood to Punjab, operation Blue star were done to ensure peace and stability.

- Rajiv - Longowal Accord - was signed with terms of :-
 - ↳ Giving Chandigarh to Punjab.
 - ↳ Resolution of Water Sharing Issues.
 - ↳ Punjabi to be the secondary language in neighbouring states.
 - After the accord in 1984 Punjab has been largely peaceful and has seen prosperous growth after Success of Green revolution.
 - Recently ~~the~~ Punjab Government has once again passed a resolution to give Chandigarh to Punjab. ~~and to resolve the Beas~~
 - The water sharing of Beas river is also a problem between the states of Punjab and Haryana.
- With discussions and consultations between Centre and states India adopted a federal approach to Punjab crisis.

15. Give a brief account of the distribution of installed capacity of solar power in India. Highlighting the challenges in proper utilisation of solar energy, mention the steps taken by the government to promote it in India.
(250words) 15

Q15.

India is a tropical monsoon country with 300+ sunshine days. Thus giving immense potential to harness Solar Energy.

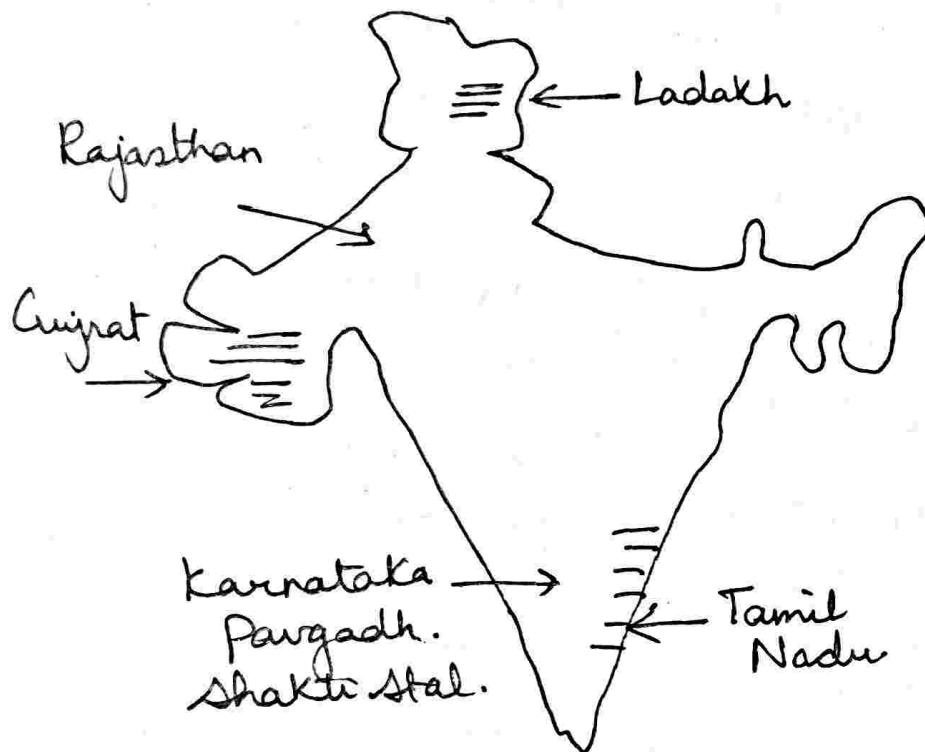


Fig: Distribution of Solar Energy

→ Installed Capacity is poised to reach 500GW by 2040. As targetted in INDCs (450GW by 2030).
India is well on its way to achieve the targets

- ⇒ Largest solar power plant of 2100MW in state of Rajasthan.
- ⇒ second largest Solar plant in Karnataka - Pavagadh Tumkur district - Shakti Stal - 2050MW.
- ⇒ Other states like Gujarat, Tamil Nadu, MP have made investments in Solar Parks.
- ⇒ Roof top solar panels are also being popularised.

Challenges in proper utilization of solar energy.

- 1) Intermittent energy source - available only during day - when weather is good - (No rain, clouds, wind etc)
- 2) Need of Vast area - land acquisition troubles.
- 3) High maintenance and regulation of temperature needed.
- 4) Issues with photovoltaic waste generation, management and disposal.

- 5) Import heavy and India is facing charges at WTO.
- 6) Connection to Grid, storage issues transmission issues.

Steps taken by the Government

- 1) Mega Solar power parks - set up in barren areas in regions of high incoming energy.
- 2) Schemes like PM-KUSUM - motivate farmers to install solar panels in farms.
- 3) Surya mitra - to provide employment and support structures.
- 4) Credit and Priority lending by Banks.
- 5) International Solar Alliance - to collaborate at international level to get know how and expertise.

Solar energy is the future to a clean and green environment.

16. Post-drift theories based on ocean floor mapping provided new dimensions to the study of distribution of oceans and continents. Elaborate.

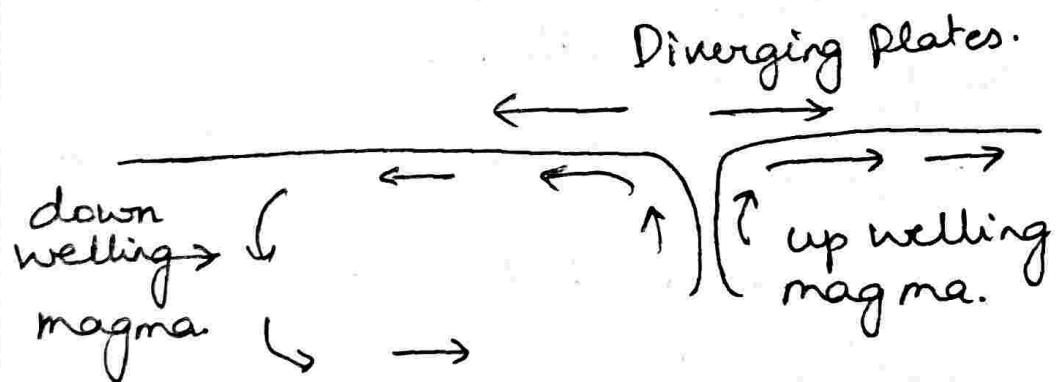
(250 words) 15

Q16.

The position of Oceans and continents was successfully put forward by Alfred Wegener in his Continental Drift theory.

The post drift theories modified and put forth the complete picture to the study of distribution of oceans and land.

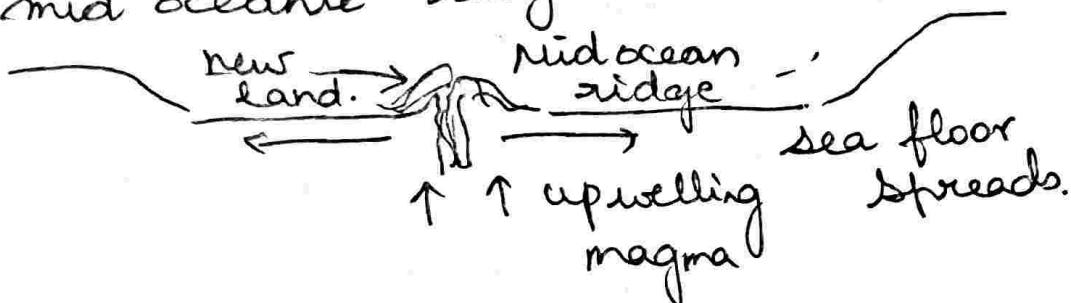
i) Convection Current Theory by Holmes.



⇒ The entire asthenosphere has magmatic convection cells - regions of upwelling magma - lead to eruption and divergence. And regions of downwelling magma lead to subduction and convergence.

2) sea floor spreading theory - By
Hans Hesse.

→ The ocean floor is younger than continental floor. It is formed and broken by the convection belts - which are found along mid oceanic ridges



→ Similarities between both the sides of the oceanic ridge.

→ The continental and Oceanic plates are joined at such ridges.

3) Plate tectonic theory. - was a culmination of Continental Drift theory, sea floor spreading theory, convection belts. It gave the reason for:

↳ formation of Mountains, earthquakes, volcanoes

↳ distribution of land and ocean. in present shape.

4) Other studies from paleo magnetism which studies the changes in polarity of the earth, geomagnetism have favoured and supported the inferences of Plate tectonic theory.

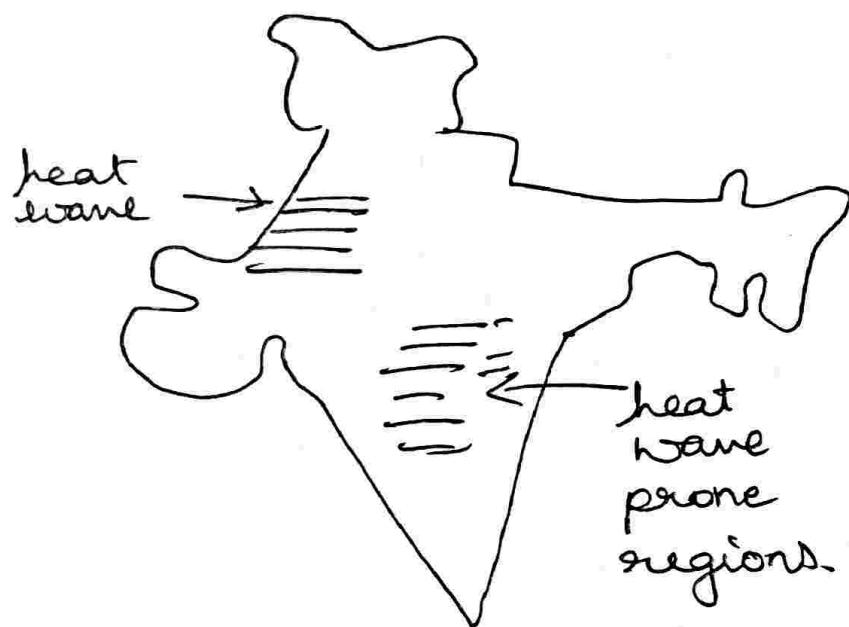
5) ~~Studies~~ Seismic Studies and indirect observations have helped to give an understanding of interior of the earth. SIAL and SIMA, geo syncline theories have further been used to elaborate on land-ocean distribution.

Thus the post drift theories have given a complete and verified understanding with reasons for the distribution of land and oceans.

17. Explain the phenomenon of heat waves. Also, enumerate the conditions favourable for the development of heat waves in India and their associated health impacts. **(250 words) 15**

Q17

Heat wave is the drastic increase in surface temperature of a region above the normal average and sustained increase for 3-5 days.



Conditions for development of heat wave :-

1. Sustained summer or high temperature
2. Cloudless sky with no precipitation
3. Anti cyclonic conditions in atmosphere with downward air pressure.
→ stability conditions.

4. Extreme drought like conditions.
5. Regions poor in vegetation - Transpiration does not occur.
6. Even in Urban regions - due to increased population pressure, green house gases and pollution heat wave conditions are common.

Regions Prone to heat Wave In India-

→ Rajasthan, Telangana - Rayalseema, Vidarbha of Maharashtra, North Karnataka. are common occurrence of heatwave.

Health Impacts

- 1) Dehydration - due to loss of water through perspiration.
- 2) Hot flashes, red skin rashes.
- 3) lower BP and Unconsciousness.
- 4) low electrolytes in body.
- 5) can even lead to sun strokes and paralysis.

The IMD issues a prior heat wave warning - during which adequate precautions are taken.

- ↳ Using glucose, water, electrolytes to keep oneself well hydrated
- ↳ Covering body completely
- ↳ Avoid working out on such days.

Due to changing climate, extreme weather events instances of heat wave are increasing, such conditions may become more common due to increased emissions and deforestation. India being a tropical country is more prone to heat wave attacks.

18. Providing an account of distribution of rainforests across the world, mention their key characteristics. Also highlight the threats that are being faced by tropical rainforests. **(250 words) 15**

Q18.

Rainforests are known as the lungs of the world. Though they cover a mere 8% of land area they are home to more than 60% of wild flora and fauna.

Distribution of tropical rainforests:-



Fig! Tropical evergreen rain forests.

Characteristics

- Distribution:- Distributed between the tropic of Cancer and Capricorn in both the hemispheres - in Equatorial region.
- Regions of Amazon Rainforest in Brazil, Congo in Africa, Indonesia and India.
- Region has rainfall throughout the year - equatorial rainfall - due to it being in a region of low pressure.
- Soil is poor in nutrients but is covered with humus - has no growth.
- Trees are found in size hierarchy and tree canopy prevents the sunlight from penetrating to the ground.

Threats faced by Rainforests

- 1) Deforestation by lumberjacks for timber wood and furniture, also for medicinal purposes.
e.g. Chinohone Bark.

- 2) clearing of trees for plantation crops. e.g. Rubber plantations in Indonesia
or for agricultural purposes.
- 3) Deforestation for mining purposes
e.g. Cutting of Amazon forest for Gold mining.
- 4) Difficulties of indigenous tribal people - e.g. Yanamamos of Brazil
- 5) loss of biodiversity - habitat loss, threat by invasive species.
↳ Show a loss of 40-50% of pristine forests - most have become hot spots.

Conservation by biosphere method, sacred groves - Tribe-Nature links and strict rules on pollution, deforestation can save the last patches of evergreen rain forests.

19. Indian cities are not only mimicking the social and cultural structures of inequality and exclusion found in rural areas but are also creating fault lines for future conflicts. Discuss. (250 words) 15

Q19. Cities are said to be the growth engines for future. According to UNDP report 50% of Indian population will live in urban areas by 2050.

Indian City and Socio-Cultural inequality and exclusion ⇒

1) Urban areas are preferred for they give anonymity, job opportunities and upward mobility. But to the contrary.

⇒ Cities are divided based on caste lines ⇒ exclusive SC areas, Madiga Colony - are common in cities.

⇒ Caste - Occupation link which is prevalent in jajmani system continues in Cities. Where Nai, Chamar, Lohar are found in hereditary occupations.

- Renting of rooms or houses according to caste
 - ↳ Preference for Vegetarians only.
- Inter Caste Marriages have not been common even among urban youth.

Fault lines for future conflicts

- 1) Inequality can give rise to divisive tensions → lead to increase in revenge crimes.
 - ↳ Rape of Dalit women in Dholpur of Rajasthan.
 - ↳ Increased poverty and thus rise in crimes.
- 2) fractured economic fabric - due to exclusion of certain castes and religions.
- 3) Skewed development of the city - underdeveloped slum regions with poor infrastructure contrasted with posh areas of cities - e.g. Dharavi slum in Mumbai.

4) Increasing cases of practice of untouchability in different forms.

According to a survey 36% of upper castes still practice Untouchability though it is outlawed.

Indian Cities can be said as an extension of rural social fabric.

Measures for integration

↳ By inclusivity and exchange of social customs and rituals.

↳ Going by one's achievement and not birth based ascriptive model.

↳ Governmental schemes meant especially for urban poor to be introduced.

↳ A harmony- peace based community living models as opposed to present caste based gated communities.

Cities should represent a true integrated, homogenous and egalitarian way of life based on constitutional principles of fraternity and liberty.

20. Examine the multi-dimensional impact of globalisation on tribal development in India. (250 words) 15

Q20.

Globalisation is the economic integration of the entire world. Its impact has far reaching effects on social, political, environmental aspects also.

Impact of globalisation on Tribal development

Negative Impacts

- ↳ Tribals are isolated, primitive, have substance based lifestyle who stay in dense forest regions.
- Globalization and opening of forests for mining, timber extraction, exploiting valuable forest resources, tourism has affected the simple lifestyle of tribals.
e.g. Dongria Konds of Niyamgiri hills in Odisha affected after Vedanta Aluminium mining exploration.
- ↳ Infrastructure projects like highways, rail roads, dams have invaded forest lands.

eg> Warli tribal region in Maharashtra
↳ Dardar Sarovar dam.

- ↳ Changes in occupation → from primitive to mainstream work culture was forced on them.
- ↳ Increased erosion of Tribal Culture and language. They were portrayed as barbarians and savages by ethnocentric colonisers
- eg> 1) Grahul system of Youth Dormitories in Muria Gonds.
2) Extinction of Bo language in Andaman.

↳ Complete extinction of Tribes.
eg> Jangil tribe of Andaman.

Positive Impact

- ↳ Introduction to westernization Urbanization and rapid growth and development.
- ↳ Use of technology - access to latest electronic gadgets → helping to increase standard of living.

- ↳ Mainstream blue collared and white collared occupations
→ by Government reservations and support.
- ↳ Sanskritization and Hinduization of Tribes who have assimilated into mainstream culture.
e.g> Bhumi tribes.
- ↳ An avenue to market, advertise and protect tribal heritage with national and international support
e.g> Vanbandhu Kalyan Yojana, Mithili and Warli paintings, Kalbelia dance etc.

Globalization has given many opportunities to tribals but at the same time has changed their identity - Policy of Integration as given in tribal Panchayat is the best way to develop the indigenous tribes.